

ABSTRACT**METHOD FOR SELECTIVE TRIMMING OF GATE STRUCTURES AND
APPARATUS FORMED THEREBY**

5 A method for forming a trimmed gate in a transistor comprises the steps of
forming a polysilicon gate conductor on a semiconductor substrate and trimming the
polysilicon portion by a film growth method chosen from among selective surface
oxidation and selective surface nitridation. The trimming step may selectively
compensate n-channel and p-channel devices. Also, the trimming film may optionally be
removed by a method chosen from among anisotropic and isotropic etching. Further,
10 gate conductor spacers may be formed by anisotropic etching of the grown film. The
resulting transistor may comprise a trimmed polysilicon portion of a gate conductor,
wherein the trimming occurred by a film growth method chosen from among selective
surface oxidation and selective surface nitridation.

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